IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Thomas V. Magee, et al.

Examiner: To Be Assigned

APPLICATION NO.: To Be Assigned

FILING DATE: To Be Assigned

:Group Art Unit: To Be Assigned

TITLE: Nicotinamide Acids, Amides, and Their Mimetics:

Active As Inhibitors of PDE4 Isozymes

Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450

Sir:

<u>PURSUANT TO 37 C.F.R. § 1.97 ET SEQ.</u>

Applicant(s) herein make(s) available to the U.S. Patent and Trademark Office a copy of PTO-FB-A820 which lists the references cited by the applicant(s), copies of which are enclosed.

The Examiner is requested to consider carefully the complete text of these references in connection with the examination of the above-identified application in accord with 37 C.F.R. § 1.104(a). It is believed the Examiner will concur with applicant's belief that the subject matter presently claimed is neither anticipated nor rendered obvious by the foregoing references.

It is requested that the references listed on the attached form PTO-FB-A820 be included in the "References Cited" portion of any patent issuing from this application (M.P.E.P. § 1302.12).

A prompt and favorable response is earnestly solicited.

Date: February 17, 2014

Robert T. Ronau

Attorney for Applicant(s)

Respectfully submitted,

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Pfizer Inc.

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(Use several sheets if necessary)	APPLICANT Thomas V. Magee, e	t. al							
Page 2 of 3	FILING DATE To Be Assigned	GROUP To Be Assigned							
OTHER DOCUMENTS	(Including Author, Title, Date, Pertinen	t Pages, Etc.)							
Trophy, Theodore J. et al, "Phospho Environmental Health Perspectives,	Trophy, Theodore J. et al, "Phosphodiesterase IV Inhibitors as Therapy for Eosinophil-induced Lung Injury in Asthma," Environmental Health Perspectives, Vol. 102 Suppl. 10, Dec. 1994, pp 79-84,								
Duplantier, Allen J., et al., "Biarylcar Binding Activity and Their Relations! pp 120-125	Duplantier, Allen J., et al., "Biarylcarboxylic Acids and -amides: Inhibition of Phosphodiesterase Type IV versus [3H]Rolipram Binding Activity and Their Relationship to Emetic Behavior in the Ferret, Journal of Medicinal Chemistry," 1996, Vol. 39, No. 1, pp 120-125								
Schneider, Herbert H, et al, "Discrim Rolipram," Pharmacology Biochemis	Schneider, Herbert H, et al, "Discriminative Stimulus Properties of the Stereoisomers of the Phosphodiesterase Inhibitor Rolipram," Pharmacology Biochemistry and Behavior, Vol. 50, No. 2, 1995, pp. 211-217 Banner, Katherine H., et. al., "Acute versus chronic administration of phosphodiesterase inhibitors on allergen-induced pulmon cell influx in sensitized guinea-pigs, "British Journal of Pharmacology, 114, 1995, pp. 93-98 Barnette, Mary S., et. al., "The Ability of Phosphodiesterase IV Inhibitors to Suppress Superoxide Production in Guinea Pig Eosinophils Is Correlated with Inhibition of Phosphodiesterase IV Catalytic Activity," The Journal of Pharmacology and Experimental Therapeutics, 273, 1995 pp. 674-679								
Banner, Katherine H., et. al., "Acute cell influx in sensitized guinea-pigs,"									
Eosinophils Is Correlated with Inhibit									
Wright, Kathryn, F., et al., "Differenti inhibitor, "Can. J. Physiol. Pharmac	al in vivo and in vitro bronchorelaxant activities of bl. 75, 1997, pp.1001-1008	f CP-80,633, a selective phosphodiesterase							
Manabe, Haruhiko, "Anti-inflammate European Journal of Pharmacology,	ory and Bronchodilator Properties of KF19514, a 332, 1997, pp. 97-107	Phosphodiesterase 4 and 1 Inhibitor,"							
Ukita, Tatsuzo, et. al., "Novel, Poten Biological Activities of a Series of 1-	t, and Selective Phosphodiesterase-4 Inhibitors a Pyridylnaphthalene Derivatives, J. Med. Chem, 4	ns Antiasthmatic Agents: Synthesis and 8, 1999, pp. 1088-1099							
Compton, CH, et. al., "The Efficacy of J. Respir. Crit. Care Med., 159, 1999	of Ariflo [™] (SB 207499, A Second Generation, Ora	of PDE4 Inhibitor, In Patients with COPD, A							
Leeman, Marc M.D., et. al., "Reducti Decompensated COPD*," Chest, 91	on in Pulmonary Hypertension and in Airway Res , 1987, pp. 662-6	sistances by Enoximone (MDL 17,043) in							
Rabe, K.F., et. al., "Identification of I Physiol, 266 (LCMP 10), 1994, pp. L	PDE Isozymes in Human Pulmonary Artery and E 536-L543	ffect of Selective PDE Inhibitors," Am. J.							
Hughes, Bernadette, et. al., "PDE 4 Discovery Today, Science Direct, 2(nhibitors: the use of molecular cloning in the deal, 1997 pp. 89-101	sign and development of novel drugs, Drug							
Banner, K.H., et. al., "The Effect of S Allergen-induced Eosinophilia in Gui	elective Phosphodiesterase Inhibitors in Compai nea-pig Airways," Pulmonary Pharmacology, 8, 1	rison with other Anti-asthma Drugs on 995, pp. 37-42							
Raebum, David, et.al., "Anti-inflamm typed IV inhibitor," Br, J. Pharmacol.	atory and bronchodilator properties of RP 73401, 113, 1994, pp. 1423-1431	a novel and selective phosphodiesterase							
Karlsson, J.A., et. al., "Anti-Inflamma Immunol, 107, 1995, pp. 425-426	tory Effects of the Novel Phosphodiesterase IV I	nhibitor RP 73401," Int. Arch Allergy							
Escott, K.J., et. al., "Pharmacologica Rats and Dogs, Br. J. Pharmacol, 1	l Profiling of Phosphodiesterase, 4 (PDE4) Inhibi 23 (Proc suppl.) 1998 40P	tors and Analysis of the Therapeutic Ratio							
Cell Activation," Eur. Resp. J., 12 (S									
Human Volunteers," Am. J. Respir. (ic-Pharmacokinetic (PD/PK) Profile of the Phosp Crit Care Med., 159, A611, 1999, pp A108								
Asthma and Early Clinical Studies,"	8, A Novel Phosphodiesterase 4 (PDE4) Inhibitor Am. J. Respir. Crit., Care Med., 159, A108, 1999	pp A624							
Asthma," Am. J. Respir. Crit. Care N									
HI]Indolines: Novel PDE4 Inhibitors,									
Burnouf, C., et. al., "Pharmacology of	f the Novel Phosphodiesterase Type 4 Inhibitor,	CI-1018." 215 th ACS, MEDL 008, 1998							

INFORMATION	ON DISCLOSURE CITATION	ATTY. DOCKE	T NO. PC11895B	SERIAL NO. To Be Assigned						
(Use sei	veral sheets if necessary)	APPLICANT Thomas V. Magee, et. al.								
	Page 3 of 3	FILING DATE	To Be Assigned	GROUP To Be Assigned						
	Mueller, George W., et. al., "N-Phtha	lloyl-β- Aryl- β- Amino	Derivatives Potent TNF-α And	PDE4 Inhibitors, MEDI, 299, 1999						
	Mueller, George W., et. al., "Thalidomide Analogs and PDE4 Inhibition," Bioorganic & Medicinal Chemistry Letters," 8, 1998 pp. 2669-2674									
	Takayama, K., "Synthetic Studies on Selective Type IV Phosphodiesterase (PDE IV) Inhibitors," MEDI 245, 1997									
	Gordon, T., et. al., "Anti-Inflammatory Effects of a PDE4 Inhibitor in a Rat Model of Chronic Bronchitis," Am. J. Respir. Crit. Care Med., 159, A33, 1999									
	Perrier, Helene, et. al., "Substituted Furans as Inhibitors of the PDE4 Enzyme," Bioorganic & Medicinal Chemistry Letters 9, 1999, pp. 323-326									
	Groneberg, Robert D., et. al., "Dual Inhibition of Phosphodiesterase 4 and Matrix Metalloproteinases by an (Arylsulfonyl)hydroxamic Acid Template," Journal of Medicinal Chemistry, 1999, Vol. 42, No. 4, pp. 541-544									
	Fujimura, Masaki, et. al. Bronchoprotective Effects of KF-19514 and Cilostazol in Guinea Pigs In Vivo," European Journal of Pharmacology, 327, 1997, pp. 57-63									
	Manabe, Haruhiko, et. al., "KF19514, a Phosphodiesterase 4 and 1 Inhibitor, Inhibits PAF-Induced Lung Inflammatory Responses by Inhaled Administration in Guinea Pigs," International Archives of Allergy-Immunology, 1997, 114, pp. 389-399									
	Suzuki, Fumio, et. al., "New Bronchodilators, 3. Imidazo[4,5-c][1,8]naphthyridin-4(5H)-ones," Journal of Medicinal Chemistry, 1992, Vol., 35, No. 26, pp. 4866-4874									
	Matsuura, Akihiro, et. al., "Substituted 1,8-Naphthyridin-2(1 <i>H</i>)-ones as Selective Phosphodiesterase IV Inhibitors," Biol. Pharm. Bull. Vol. 17(4), 1994, pp. 498-503									
	Manabe, Haruhiko, et. al., "Pharmacological properties of a New Bronchodilator, KF17625," Jpn. J. Pharmacol., 58 (Suppl 1)., 1992 pp. 238									
	Montana, John G., et. al., "PDE4 Inhibitors: New Xanthine Analogues," Bioorganic & Medicinal Chemistry Letters 8, 1998, pp. 2925-2930									
	Merz, Karl-Heinz, et. al., "Synthesis of Positional Isomers. Potent Inhibitors Medicinal Chemistry, Vol. 41, No. 24	of cAMP-Specific Pl	nosphodiesterase and of Maligna	teridine and Novel Derivatives Free of ant Tumor Cell Growth," Journal of						
	Danhaive, P., et. al., "UCB29936, A Selective Phosphodiesterase Type IV Inhibitor; Therapeutic Potential In Endotoxic Shock," Am. J. Respir, Crit. Care Med., 159, A611, 1999									
	Tian, Gaochao, et. al., "Dual Inhibitio (cyclopentyloxy)-4-methoxyphenyl]-3	n of Human Type 4 F -methyl-1-pyrrolindin	Phosphodiesterase Isostates by ecarboxylate," Biochemistry, 37((R*,R*)-(±)-Methyl 3-Acetyl-4-[3- 19), 1998 pp. 6894-6904						
	Norman, Peter, "PDE4 Inhibitors 199	9," Exp. Opin. Ther.	Patents 9(8) 1999, pp. 1101-111	8						
	Dyke, Hazel J. & Montana, John G., 1999, pp. 1301-1325	"The Therapeutic Po	tential of PDE4 Inhibitors," Exper	t Opinion on Investigational Drugs, 8(9),						
	XP-002066969, Vinivk, Fredric J., et. [3H]Rolipram Binding," Journal of Me	al., "Nicotinamide Ei dicinal Chemistry, V	thers: Novel Inhibitors of Calciur ol. 34, No. 1., 1991, pp. 86-89	n-Independent Phosphodiesterase and						
	Pruniaux, M.P., et. al., "The novel ph brown-norway rats – comparison with	osphodiesterase 4 in rolipram," Mediators	hibitor CI-1018 inhibits antigen-ir of Inflammation, Vol. 8, Supple	nduced lung eosinophilia in sensitized ment 1, 1999, S-04-6, pp. S10						

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.